

# The UVS case study on the barycentric encounters of the Earth in 2029

Author: Vincent Wee-Foo      email: opcvincentwee@gmail.com

16<sup>th</sup> December 2020

Principle research: The UVS inductive resolution on the 1908 Tunguska event [\[1\]](#)

## Abstract

The UVS treatise with its paradigm shift, postulates the alignments of the Earth with the barycenters of the Solar System, the Sun, and the major barycenters of the four gas giants, could cause significant effects of torque-induced precession on the Earth. As a result, its intrinsically manifested torque-free precession resonated in the atmospheres, oceans, and the mantle sphere of the Earth, could generate the vortical torsion forces to cause severe storms, oceanic whirlpools, earthquakes and eruptions of volcanoes. And the direct collisions with the barycenters of the gas giants could thus intrinsically resonate to cause the vortical implosions of the Solar System objects.

The Lagrangian points of the four gas giants and their barycenters could also have adverse effects to the satellite systems or spacecrafts on their near encounters.

Keywords: Paradigm shift, barycenter, barycentric alignment, and Lagrangian points.

## 1. Introduction

This is an extended visual grounded theory research [\[2\]](#) of the UVS treatise [\[3\]](#) with its reality paradigm shift [\[4\]](#).

In the UVS worldview [\[5\]](#) of its cosmological model [\[6\]](#), planetary objects such as the Sun, Jupiter [\[7\]](#), and Earth are all systems of vortical hyperspheres. These Solar System objects are indifferent when they are

subjected to the planetary barycentric effects, such as the effects of torque-free precession [\[8\]](#) resonated as a result of the planetary alignments.

Despite the tidal forces [\[9\]](#) from the four gas giants [\[10\]](#) of the Solar System are miniscule at distant, their barycentric alignments were shown in a UVS case study to be causing the solar cycle fluctuations. [\[11\]](#)

The Lagrangian points [\[12\]](#) of the four gas giants at close proximities to comets were also shown in a UVS case study to be the probable cause for a series of recurring cometary outbursts for comet 29P [\[13\]\[14\]](#), which occurred in the outer Solar System.

A UVS case study unequivocally showed many of the impact craters were actually not as the results of asteroid impacts. [\[15\]](#)

A mysterious massive eruptions of a volcanic cluster on Mars [\[1\]](#) was in fact observed to have had happened simultaneously, which covered a land size as large as the entire continent of Australia. Also, inexplicable recurring massive outbursts of comet 17P/Holmes [\[16\]](#) and sunquakes [\[17\]](#) were observed.

With the Celestia planetarium set on the barycentric platform [\[Appendix A\]](#) for this case study, the dynamic locations for the critical barycenters [\[18\]](#) of the four Solar System gas giants and their Lagrangian points were thus investigated for their alignments and close encounters with the Earth.

## 2. The visual analysis with the set up of a barycentric Solar System planetarium

With the simulated barycentric Solar System planetarium that sampled the planetary arrangements of the Solar System from 2029 to 2031 [19] in a biweekly interval, it was visualized that some barycenters of the four gas giants would have entered the inner Solar System in 2029, and would then leave in 2031.

In the UVS worldview, planetary barycenters have mass effect, and they modulate the motions of the Solar System objects. These infer barycenters could generate their Lagrangian points. The hypothetical barycentric Lagrangian points were thus invoked for their visualizations on some of the near encounter cases.

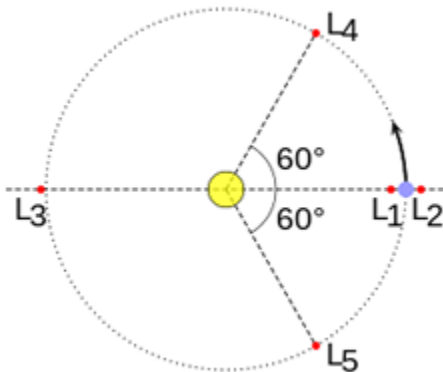


Diagram showing the five Lagrangian points. [Public domain]

Heuristically, the four gas giants have 11 barycenters [Appendix B], 20 Lagrangian points, and 55 barycentric Lagrangian points.

The visualizations with these barycentric motions and their Lagrangian points were thus further investigated with the case study of this extended visual grounded theory research. They were investigated for their planetary alignments and near encounters with the Earth during the transit of BJSUN in the inner Solar System.

## 3. The visual analysis method of this extended case study

The critical barycenters of the gas giants were calculated and then manually indicated in the digitally captured images of the planetarium charts. [Appendix C]

With the critical barycenters and their Lagrangian points visualized in the planetarium charts, their planetary alignments involving the Earth, the motions of these barycenters, and their Lagrangian points could thus be perceived.

This is the provision for the visual analysis method to study the near encounters of these nonmaterial entities with the Earth and the two STEREO spacecrafts [20] located at the Earth's L4 and L5 Lagrangian points.

## 4. The visual analyses with the individual case studies

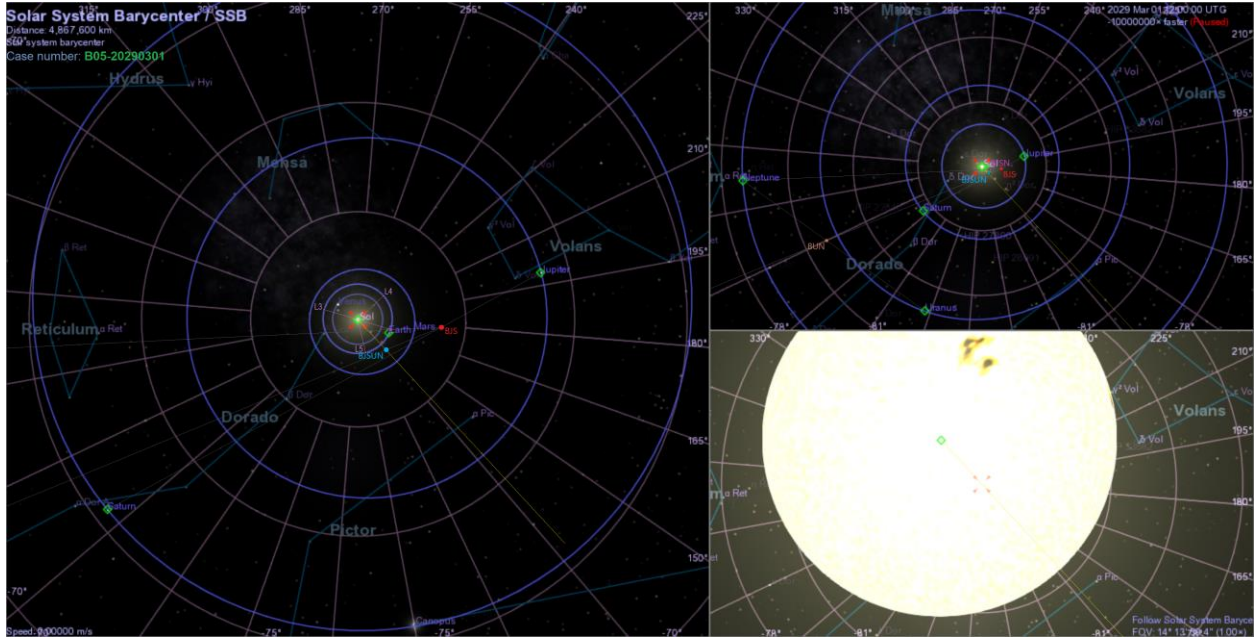
The barycenter of Jupiter, Saturn, Uranus, and Neptune (BJSUN) entering the inner solar system in early 2029 with its Lagrangian points, despite would make 3 barycentric alignments, would not have any alarmingly near encounter with the Earth during its transit in the inner Solar System.

For case number B05, the barycenter of Jupiter, Saturn, and Neptune (BJSN) and two of its Lagrangian points would be making very near encounters with the Earth and the two STEREO spacecrafts. And they could be on the paths of making direct collisions.

This particular finding of the case study for case number B05 is very alarming. And warrants its further investigation for thorough details.

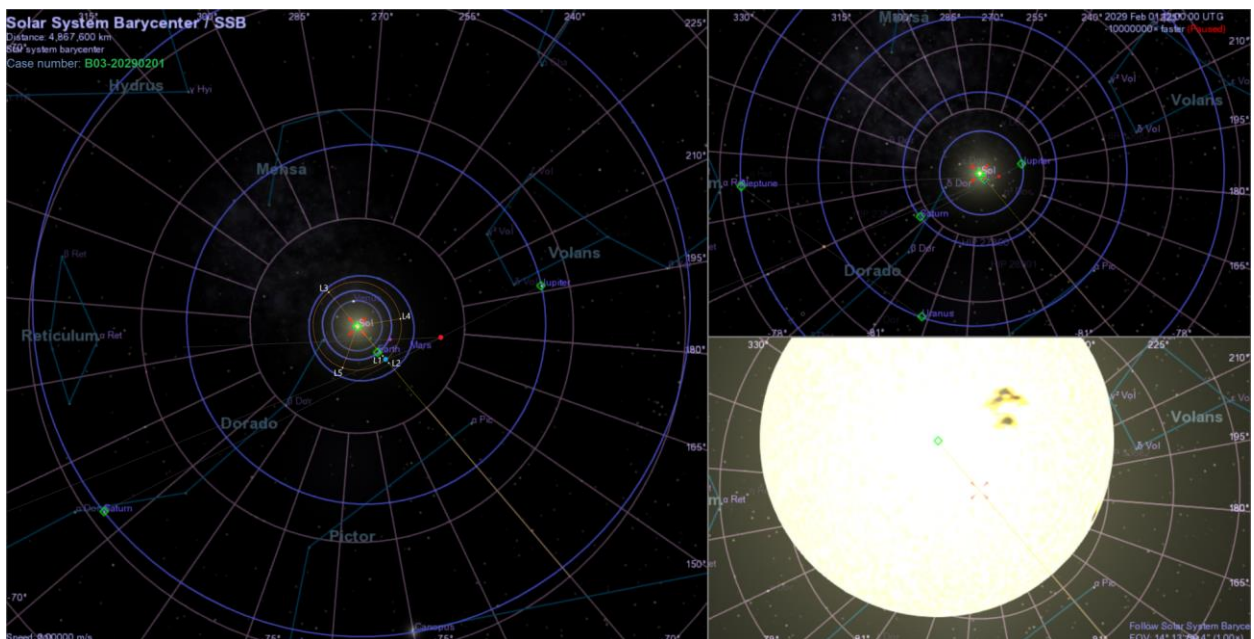
#### 4.1 Case number B05: A possible collision course of the Earth crashing with BJSN

In early March 2029, the Earth would be heading straight toward BJSN while this barycenter crosses the Earth's orbit. The two STEREO spacecraft at the L4 and L5 locations of the Earth's Lagrangian points would also be heading toward the L4 and L5 Lagrangian points of BJSN. [\[21\]](#)



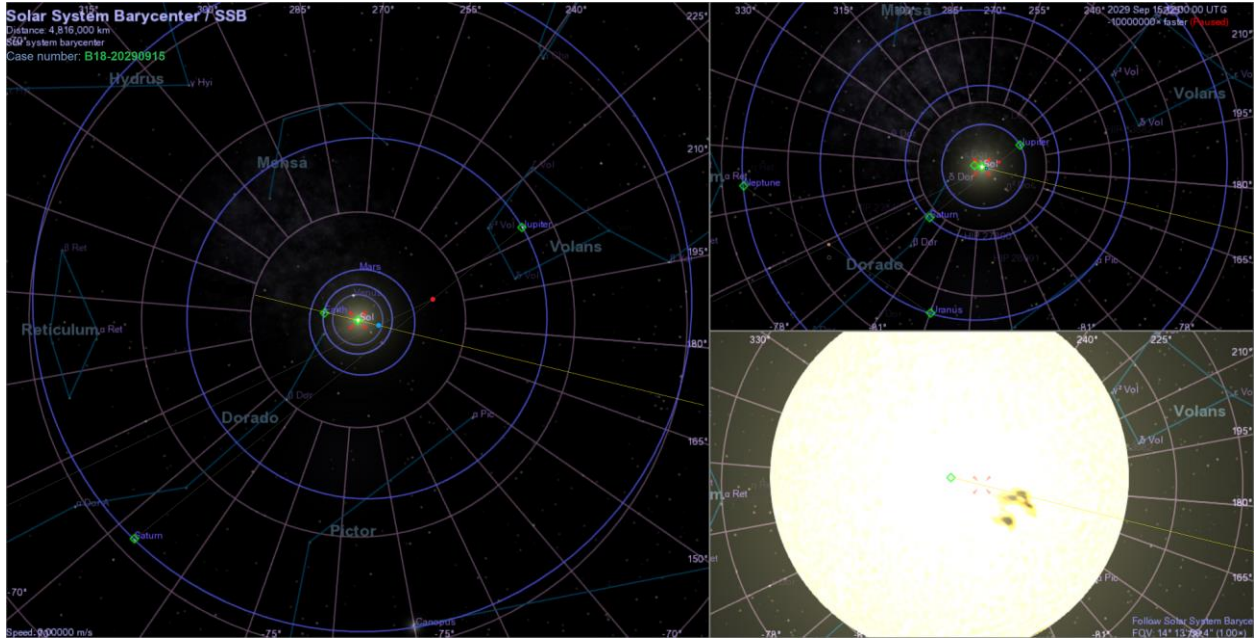
#### 4.2 Case number B03: A barycentric alignment with the Earth

In early February 2029, the Earth would be in the alignment of Sun-SSB-Earth-BJSUN.



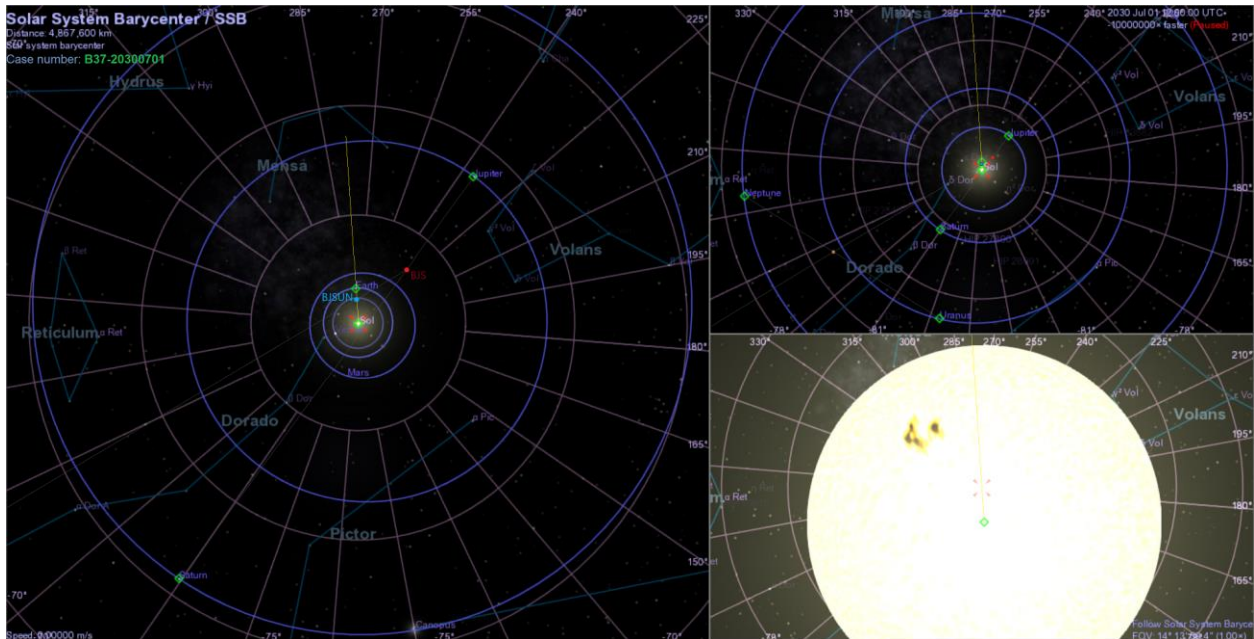
### 4.3 Case number B18: A barycentric alignment with the Earth

In mid September 2029, the Earth would be in the alignment of Earth-Sun-SSB-BJSUN.



### 4.4 Case number B37: A barycentric alignment with the Earth

In early July 2030, the Earth would be in the alignment of Sun-SSB-BJSUN-Earth.



## 5. The shortcomings of this case study

Under current circumstances, without a computerized barycentric planetarium to calculate and plot the barycenters and their Lagrangian points, the manual works were laborious, inefficient, not very precise, less thorough, and would risk many human errors and omission errors.

The visual analysis for the paths of all the major barycenters and their Lagrangian points requires a much higher resolution planetarium in a 3D set up at a higher sampling rate with greater precision to automatically plot and hunt the barycentric alignments, which was not currently available.

## 6. Concluding remarks

In this case study, BJSUN would enter the inner Solar System by early 2029 and leaves in early 2031 with no probability for its collision with the Earth. And the Lagrangian points of BJSUN should not have any adverse effect on the Earth or its satellites for being at far distant during its inner Solar System transition. In this transit of BJSUN, the Earth would make 3 alignments with SSB, Sun, and BJSUN in 3 different configurations of the alignments.

As shown with case number B05, the Earth and the two STEREO spacecrafts would be heading straight toward BJSUN and two of its Lagrangian points in March 2029, and it showed a high probability of them getting into direct collisions. There is a need to know will the Earth be brushing pass this

barycenter, heading in for a direct or indirect hit, when and where exactly could it hit or brush over in March 2029

And when BJSUN exits the Earth's orbit in mid November 2029 as shown in a barycentric motion animation [\[19\]](#) for the case number B22, its L3 Lagrangian point would be at close proximity to the Earth.

When at the close proximity to this L3 Lagrangian point without the shielding from the Earth's magnetosphere [\[22\]](#), the communication and satellite systems of the Earth could be adversely affected by the effects of its charge field. [\[23\]](#)

## Acknowledgement

With special thanks to Dr. Vuthipong Priebjivat for his personalized initiative on the introduction of his book "DRAW YOUR THOUGHT" [\[24\]](#) that elaborated on a visual analysis skill for conducting research.

This research is indebted to the Celestia Development Team for its planetarium with the Solar System Barycenter (SSB) capability [\[Appendix A\]](#).

Appreciate the efforts of a GW from SkyMarvels.com for his step-by-step guidance to use the Celestia planetarium.

Appreciate the efforts of Gurren Lagann, who is a member of the Celestia forum [\[25\]](#) for asserting with his comparative analysis on the tidal force from the barycenter of the four gas giants (BJSUN) would not be significance at all at that far distant from the Earth for the case study of B03.

[\[Section 4.2\]](#)

## References and links

- [1] Vincent Wee-Foo; The UVS visual inductive resolution on the 1908 Tunguska event (September 2007) from: <https://www.uvs-model.com/WFE%20on%20Tunguska%20event.htm>
- [2] Krzysztof Konecki; Visual Grounded Theory (August 2011). {B:November 2020} from [https://www.researchgate.net/publication/233991214\\_Visual\\_Grounded\\_Theory\\_A\\_Methodological\\_Outline\\_and\\_Examples\\_from\\_Empirical\\_Work](https://www.researchgate.net/publication/233991214_Visual_Grounded_Theory_A_Methodological_Outline_and_Examples_from_Empirical_Work)
- [3] Vincent Wee-Foo; The treatise of the Universal Vortical Singularity (May 2007) from <https://www.uvs-model.com/>
- [4] Thomas Kuhn; The Structure of Scientific Revolutions (1962). {B:2015}
- [5] Vincent Wee-Foo; The UVS worldview (June 2011) from: <https://www.uvs-model.com/UVS%20worldview.htm>
- [6] Vincent Wee-Foo; The cosmological model of UVS (May 2007) from: <https://www.uvs-model.com/UVS%20on%20the%20vortical%20universe%20model%20of%20UVS.htm>
- [7] Vincent Wee-Foo; The vortices of Jupiter (27<sup>th</sup> July 2007) from: <https://www.uvs-model.com/WFE%20on%20vortices%20of%20Jupiter.htm>
- [8] Wikipedia contributors. (2020, December 5). Precession. In *Wikipedia, The Free Encyclopedia*. Retrieved 15:47, December 8, 2020, from <https://en.wikipedia.org/w/index.php?title=Precession&oldid=992505827>
- [9] Wikipedia contributors. (2020, December 4). Tidal force. In *Wikipedia, The Free Encyclopedia*. Retrieved 00:42, December 10, 2020, from [https://en.wikipedia.org/w/index.php?title=Tidal\\_force&oldid=992226680](https://en.wikipedia.org/w/index.php?title=Tidal_force&oldid=992226680)
- [10] Wikipedia contributors. (2020, December 7). Gas giant. In *Wikipedia, The Free Encyclopedia*. Retrieved 15:50, December 8, 2020, from [https://en.wikipedia.org/w/index.php?title=Gas\\_giant&oldid=992784080](https://en.wikipedia.org/w/index.php?title=Gas_giant&oldid=992784080)
- [11] Vincent Wee-Foo; Animation showing a series of planetary alignments that cause the fluctuations of solar cycle 1 (November 20, 2020) from <https://www.uvs-model.com/pictures/Celestia-SC01.gif>
- [12] Wikipedia contributors. (2020, December 1). Lagrange point. In *Wikipedia, The Free Encyclopedia*. Retrieved 15:15, December 8, 2020, from [https://en.wikipedia.org/w/index.php?title=Lagrange\\_point&oldid=991700883](https://en.wikipedia.org/w/index.php?title=Lagrange_point&oldid=991700883)
- [13] Richard Miles of British Astronomical Association (2013 August) {B:2014}. 29P/Schwassmann-Wachmann: A most enigmatic comet from: [https://britastro.org/journal\\_item/3246](https://britastro.org/journal_item/3246)
- [14] Vincent Wee-Foo; A series of empirically observed Comet 29P outbursts from January 2008 to April 2010 (August 2014) from: <https://www.uvs-model.com/x%20Comet%2029P%20outbursts.htm>
- [15] Vincent Wee-Foo; The UVS visual inductive resolution on the dual-core crater (June 2007) from: <https://www.uvs-model.com/WFE%20on%20impact%20crater%20and%20volcano.htm>
- [16] Wikipedia contributors. (2020, December 4). Comet Holmes. In *Wikipedia, The Free Encyclopedia*. Retrieved 15:40, December 8, 2020, from [https://en.wikipedia.org/w/index.php?title=Comet\\_Holmes&oldid=992216660](https://en.wikipedia.org/w/index.php?title=Comet_Holmes&oldid=992216660)
- [17] Alexander G. Kosovichev; Sunquakes and starquakes (2013) from: <https://www.cambridge.org/core/services/aop-cambridge-core/content/view/5771172818DA11A376CD8FAA6A3EDEC1/S1743921313014579a.pdf/div-class-title-sunquakes-and-starquakes-div.pdf>
- [18] Wikipedia contributors. (2020, July 2). Barycenter. In *Wikipedia, The Free Encyclopedia*. Retrieved 01:05, November 20, 2020, from <https://en.wikipedia.org/w/index.php?title=Barycenter&oldid=965615398>
- [19] Vincent Wee-Foo; Animated planetarium showing the transit of BJSUN in the inner Solar System in 2029 to 2031 (December 8, 2020) from: <https://www.uvs-model.com/pictures/Earth-BJSUN.gif>
- [20] Wikipedia contributors. (2020, September 25). STEREO. In *Wikipedia, The Free Encyclopedia*. Retrieved 15:52, December 8, 2020, from <https://en.wikipedia.org/w/index.php?title=STEREO&oldid=980261482>
- [21] Vincent Wee-Foo; Animated planetarium showing the Earth moving toward BJSN (December 8, 2020) from: <https://www.uvs-model.com/pictures/Earth-BJSN.gif>
- [22] Wikipedia contributors. (2020, November 28). Magnetosphere. In *Wikipedia, The Free Encyclopedia*. Retrieved 03:58, December 9, 2020, from <https://en.wikipedia.org/w/index.php?title=Magnetosphere&oldid=991164993>
- [23] Miles Mathis; THE CHARGE FIELD causes LAGRANGE POINTS (Publish date unknown), {B:April 2013} from <http://milesmathis.com/lagrange2.html>
- [24] Dr. Vuthipong Priebrivat; DRAW YOUR THOUGHTS (January 2014). {B:June 2014}
- [25] An Internet forum discussion in the Celestia Forums with Gurren Lagann on his comparative analysis of the miniscule tidal force from the barycenter of the four gas giants (BJSUN) acting on the Earth. (01.12.2020) from: <https://celestia.space/forum/viewtopic.php?f=7&t=20625>

### The Celestia triple barycentric planetarium chart

As illustrated in the planetary charts of this barycentric case study, the typical chart on the top right side is a zoomed-out planetarium chart with the positions of the gas giants marked (green markers), the barycenter of Jupiter and Saturn (BJS; red dot), the barycenter of Uranus and Neptune (BUN; brown dot), and the barycenter of Jupiter, Saturn, Uranus, and Neptune (BJSUN; cyan dot). All other minor barycenters were selectively marked with purple or blue dots.

The bottom right side is a zoomed-in chart to show the alignment of Sun (green marker) and SSB (red crosshair) with a yellow line projected from the center of the Sun. This yellow line was then manually copied to overlay onto the chart on the left. The view is looking from top of the North Celestial Pole. Sun and all the gas giants from this perspective are observed to be revolving around SSB in the counter-clockwise direction.

The left side is a zoomed-in chart showing the close-up view of the barycenters in the inner Solar System.

### The Celestia barycentric planetarium setup

Download, install, and run the Celestia Planetarium applet. <https://celestia.space/>

To Mark an Object:

After it is fully loaded, press ENTER (which opens Target name at bottom of window)

Type SSB, Sun, Jupiter, Saturn, Uranus, or Neptune, and then hit [Enter].

Press G to go to the object.

Left Click on the object to select it.

Right Click on it would show a small drop-down menu, and then select "Mark" from small drop-down menu.

Mark these objects: SSB, Sun, Jupiter, Saturn, Uranus, and Neptune.

Right drag to rotate the view of the planetarium for placing SSB approximately at the center of the ecliptic plane.

Click the two mouse buttons simultaneously to rotate the frame of view.

To set SSB as the center of the Solar System:

[Enter] (A bar showing "Target name:" should appear at the bottom of the chart.)

Type SSB and then [Enter].

Press C (which will center SSB in the chart).

Press G (This will zoom in to SSB, use mouse wheel for zooming out.)

Select [View], [Split vertically] or [Split horizontally] to set the charts.

Zoom out the left chart to a scope of view to include Neptune, zoom in the right chart to a closed-up field of view to see the SSB and the Sun.

To show the red cross-hair marker on SSB:

Press [ENTER]

Type SSB, then press [ENTER]

Click on the tab [Time], and then select [Set time] to set the simulated time.

Press L 7 times (which speeds up fast enough to see Sun's motion around SSB).

Press K to slow down.

[Space bar] to pause or start the motion.

Press J to toggle between forward and backward motion.

Consult User Guide (under Help in Celestia menu) and SkyMarvels.com Learning Center page for more info on the controls.

**The formula for calculating the barycenter positions between two objects**

The formula for calculating barycenter [16] is given as:

**Distance from mass A = Mass B/(Mass A + Mass B)**

Earth-mass is 5.972E+24 Kg

The Mass/Earth factors of the four gas giants of the Solar System:

Planet	Abbreviation	Mass (Kg)	Mass /Earth
Jupiter	J	1.898E+27	317.816
Saturn	S	5.683E+26	95.161
Uranus	U	8.681E+25	14.536
Neptune	N	1.024E+26	17.147

Note: The figures of these gas giants do not include the mass of their moons.

**The weightings of the various barycenters**

Main barycentric weightings for the case study	Acronym	Mass/Earth
Barycenter of Jupiter, Saturn, Neptune, and Uranus.	BJSUN	444.660
Barycenter of Jupiter and Saturn.	BJS	412.977
Barycenter of Uranus and Neptune.	BUN	31.683

Secondary barycentric weightings		
Barycenter of Jupiter, Saturn, and Neptune.	BJSN	430.124
Barycenter of Jupiter-Saturn-Uranus.	BJSU	427.513
Barycenter of Jupiter, Uranus, and Neptune.	BJUN	349.499
Barycenter of Saturn, Uranus, and Neptune.	BSUN	126.844
Barycenter of Jupiter and Neptune.	BJN	334.963
Barycenter of Jupiter and Uranus.	BJU	332.353
Barycenter of Saturn and Neptune.	BSN	112.307
Barycenter of Saturn and Uranus.	BSU	109.697

SSB – The barycenter of the Solar System as postulated with Celestia.



The main barycentric factors of the four gas giants for the case study

- BJSUN** = 0.071239 of distance measured from BJS to BUN, or 0.928761 from BUN to BJS.
- BJS** = 0.230376 of distance measured from Jupiter to Saturn, or 0.769624 from Saturn to Jupiter.
- BUN** = 0.458795 of distance measured from Neptune to Uranus, or 0.541205 from Uranus to Neptune.

The secondary barycentric factors of the four gas giants

- BJSN** = 0.039858 of distance measured from BJS to Neptune, or 0.960142 from Neptune to BJS.
- BJSU** = 0.033995 of distance measured from BJS to Uranus, or 0.966005 from Uranus to BJS.
- BJUN** = 0.090631 of distance measured from BUN to Jupiter, or 0.909369 from Jupiter to BUN.
- BJN** = 0.051178 of distance measured from Jupiter to Neptune, or 0.948822 from Neptune to Jupiter.
- BJU** = 0.043726 of distance measured from Jupiter to Uranus or 0.956274 Uranus to Jupiter.
- BSUN** = 0.024978 of distance measured from Saturn to BUN, or 0.750217 from BUN to Saturn.
- BSN** = 0.152681 of distance measured from Saturn to Neptune, or 0.847319 from Neptune to Saturn.
- BSU** = 0.132513 of distance measured from Saturn to Uranus, or 0.867487 from Uranus to Saturn.

An example for locating the calculated planetary barycenters

If the line connecting Jupiter and Saturn in a planetarium chart measures 98mm, the barycenter of these two planets in that chart would be located at ~22.6 mm away from Jupiter. (98 mm x 0.230423 = 22.5823mm)

